Thailand over the first two waves of the epidemic by tracking variation in the effective reproduction number, *R*t, which measures the average number of secondary cases per case.

Methods: Laboratory-confirmed cases (cases positive for influenza A/H1N1pdm 2009 by real-time PCR) were used as input data for the estimation procedure. Data points corresponded to dates of symptom onset of influenza A/H1N1pdm in Thailand from 3 May 2009 to 26 December 2010 in four geographic regions (central, north, north-east, and south). We analyzed these data using a previously described approach of epidemic reconstruction to derive estimates of how the effective reproduction number, *R*t, varied with region and over time. Confidence intervals were calculated using a bootstrap procedure.

Results: We found that the estimated *R*t values for the first wave peaked at 1.5 (with 95% CI, 1.4-1.7) in the central region and 1.6 (95% CI, 1.4-1.9) in the north, whilst the corresponding values in the north-east and the south were close to 1.3. By the time that the *R*t estimate in the central region was below one, the value of *R*t in the rest of Thailand had started to increase above one. The value of *R*t in the first wave was estimated to be above one continuously for 30 days in all regions. For the second wave, the *R*t estimates were only marginally above one within the first three months in all regions except the south.

Conclusion: The estimate values of *R*t for the first and the second waves of the influenza A H1N1pdm epidemic in Thailand varied by region, with higher estimates obtained from the central and northern regions in the first wave. Accounting for regional variation in transmission potential is important for helping to predict the course of future pandemics and for analysing potential control measures (i.e. regionally-targeted control policies).

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Epidemiological situation of malaria infections in Nikshahr: A city in the endemic area of Sistan and Balouchestan province, Southeastern Iran

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Background: Malaria, one of the most important health problem in tropical and subtropical regions is an endemic disease appeared in the Southeastern province of Iran.This descriptive study conducted to show the epidemiological feature of Malaria grams during the March 2006-March2010.

Methods: This study is a descriptive epidemiological study of Malaria. Information extracted from the monthly report forms collected by the department of health, at Zahedan university of medical sciences. Peripheral blood smears were taken from all patients who had fever. Slides were prepared in both thin film at one end and thick film at the other side and were stained with Giemsa and examined under microscope by 100X magnification. Data from completed forms of epidemiology for all positive cases were analyzed in this study.

Results: A total of 30783 reported Malaria infections from the year 2006 to 2010 were investigated, 7035(22.8%) cases were isolated from the patients in Nikshahr city. 4183(59.4%) of these patients were male and 2852(40.5%) were female. 74 cases of women were pregnant. The highest infection rate observed in the patients above 15 years old (4236 cases, 60.2%) . Malaria was seen in patients between 5-14 years and less than 4 years 2227cases, 31.6%), (572, 8.1%), respectively. According to these data, 6965(99%) of isolated species were *Plasmodium vivax*, 50(0.7%) *Plasmodium falciparum* and 20(0.2%) were found to be mixed species. Ninety-six percent(7666 cases) of patients were Iranian, 221 cases (3%) Afghan immigrants and 47(0.6%) Pakistani immigrants.

Conclusion: This study showed that *Plasmodium vivax* is the most infection of Malaria in this area and the infectrion has declined from 2937 cases in the year 2006 to the 138 cases in 2010. No case of *Plasmodium falciparum* detected in 2010. More public knowledge, health centers control, use of mosquito-net in endemic region and immigrants control were the probable reasons of Malaria decline during the past recent years.

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Why are so many infants getting measles in China?

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Background: According to the World Health Organization (WHO), measles is the leading global cause of vaccine-preventable mortality and the fifth leading cause of all childhood mortality. Furthermore, WHO estimates 20 million individuals are infected with measles every year.

China is targeted for measles elimination by 2012 as part of the WHO's Western Pacific Region elimination plan. From 2002 to 2008, China experienced an increase in measles incidence from 4.8 to 9.9 per 100,000 persons. In 2010 in Tianjin, China, a municipality of approximately 10.4 million persons, nearly 600 cases of measles were reported in children under age 1 year (a rate of approximately 450 per 100,000 persons in this age group). Despite control efforts, sustained levels of endemic transmission present challenges to accomplishing the goal of elimination.

Methods: A research collaborative between the University of Michigan and the Tianjin Centers for Disease Control and Preven-